

REMARKS

In response to the Office Action mailed January 13, 2005, Applicants respectfully request reconsideration. To further the prosecution of this application, Applicants have responded to each of the objections and rejections set forth in the Office Action.

I. Information Disclosure Statement

The Office Action states that the Information Disclosure Statement (IDS) filed on April 8, 2004 was not considered because it did not include a form PTO-1449. Applicants are not aware of any requirement that a form PTO-1449 be used for the disclosure of co-pending applications, which were all that were cited in that IDS. Nevertheless, Applicants have listed the co-pending applications, which were previously listed in the body of the IDS submitted April 8, 2004, on a form PTO-1449 attached to an IDS submitted herewith so that the applications will be considered by the Examiner.

II. Objections to the Specification

The abstract of the disclosure is objected to on two bases. First, the abstract is objected to as including multiple paragraphs. The abstract has been amended to include a single paragraph. Second, the Office Action indicates that the phrase "one embodiment of the invention is directed to an apparatus" should be replaced with --an apparatus--. However, MPEP §608.01(b) indicates that if the new technical disclosure involves alternatives, the abstract should mention by way of example the preferred alternative. Because the apparatus disclosed is merely one disclosed example, the exemplary language has been retained. However, if the Examiner continues to disagree with the form of the abstract, the Examiner is requested to contact the undersigned so that alternative language can be agreed upon.

III. Overview of the Invention

One conventional identifier for tracking an item through a supply chain or manufacturing process is an electronic product code (EPC) (page 1 line 22 – page 2, line 5). An EPC is typically burned into a memory of an RFID tag as a fixed binary number having 64 or 96 bits, and identifies an item by manufacturer, product type, and product serial number (page 2, lines 8-10). The EPC is in a standardized format that enables it to be decoded by an object naming service (ONS) (page 2, lines 5-8 and 22-24).

One aspect of the present invention relates to adapting an EPC to allow it to convey information relating to a condition of an item (e.g., temperature, weight) with which it is associated (page 4, lines 20-22 and page 5, lines 27-31). For example, the EPC may include a variable portion that is updated (e.g., by a processor in an RFID tag) to include information relating to such a condition (page 4, lines 23-26). The variable portion could be any one or more of the manufacturer, product type, and/or product serial number fields (page 4, lines 27-28). This dynamic EPC may be processed with the same reader and network infrastructure as is used for existing RFID tags which have static EPCs (page 5, lines 13-15).

The above summary of one aspect of the present invention is provided merely for the Examiner's convenience, and is not intended to characterize any of the independent claims. Therefore, the Examiner is requested to not rely upon the summary characterization above, but to closely examine each of the independent claims to ensure that each distinguishes over the references of record for the reasons discussed below.

IV. Claim Rejections under 35 U.S.C. §102(e)

Claims 1-15, 27-35 and 40, including independent claims 1 and 27, are rejected under 35 U.S.C. §102(e) as being anticipated by Daum et al. (U.S. Patent No. 6,826,267). These rejections are respectfully traversed.

a. Discussion of Daum

Daum is generally directed to controlling appliances by providing commands to the appliances over a network (Abstract).

The Office Action cites column 6, lines 60-65 and Fig. 2 of Daum as disclosing the apparatus of claim 1. The cited and related portions of Daum disclose commands that may be sent to a refrigerator to request information, and to which the refrigerator responds (col. 6, lines 30-33). For example, a command may request a door open count and duration or a food load estimate (col. 6, lines 61-62). Commands are sent in the form of a command frame 200, which is divided into multiple fields (col. 3, lines 44-45). One such field is the DATA field, which is comprised of a variable number of bits (col. 3, lines 45-47; col. 4, line 18). The DATA field is typically used in conjunction with the CMD field, which defines the command to be issued to an appliance (col. 3, lines 66-67 and col. 4, lines 18-19). For example, the DATA field may include encrypted or diagnostic commands (col. 4, lines 18-22; col. 5, lines 23-25). An appliance, such as a refrigerator, may respond by sending a query response message or an information message (col. 30, lines 48-49).

b. Independent Claim 1

Claim 1 is directed to an apparatus, comprising at least one storage device storing at least one dynamic identifier associated with at least one item. The at least one dynamic identifier is configured to include at least one variable portion that has at least one of a variable content and a variable length based at least in part on at least one detectable condition associated with the at least one item.

The Office Action suggests that the DATA field (having a variable bit length) shown in Fig. 2 of Daum is a dynamic identifier that has a variable content or length based at least in part on at least one detectable condition associated with at least one item (citing col. 6, lines 60-65 and Fig. 2). Applicants respectfully disagree.

As discussed in Section IVa, the DATA field shown in Fig. 2 of Daum is used, for example, to provide encrypted commands or diagnostic commands to an appliance (col. 4, lines

18-22; col. 5, lines 23-25). It is not variable based on any detectable condition associated with an item. In fact, although Daum discloses detecting a condition of an item (e.g., detecting the number of times and duration that a refrigerator door has been opened), it does not disclose that any such condition information is stored as a part of a dynamic identifier stored on a storage device.

In view of the foregoing, Daum does not disclose or suggest a dynamic identifier configured to include at least one variable portion that has at least one of a variable content and a variable length based at least in part on at least one detectable condition associated with at least one item, as recited in claim 1, and therefore cannot anticipate this claim. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 2- 26 depend from claim 1 and are allowable for at least the same reasons.

c. Independent Claim 27

Claim 27 is directed to a signal transporting at least one dynamic electronic product code (EPC) associated with at least one item. The at least one dynamic EPC is configured to include at least one portion that is variable based at least in part on at least one detectable condition associated with the at least one item.

The Office Action suggests that the dynamic EPC is the command frame 200 in Fig. 2 (citing portions cited in connection with claim 1, Figs. 3-4, and col. 3 line 44 - col. 4, line 34). As discussed above in connection with claim 1, the DATA field of command frame 200 is used, e.g., to provide encrypted commands or diagnostic commands to an appliance, and is not variable based on any detectable condition associated with an item. Further, no other field of command frame 200 is variable based on any detectable condition associated with an item.

In view of the foregoing, Daum does not disclose or suggest a signal transporting at least one dynamic EPC associated with at least one item, the at least one dynamic EPC being configured to include at least one portion that is variable based at least in part on at least one detectable condition associated with the at least one item, as recited in claim 27, and therefore cannot anticipate this claim. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 28-40 depend from claim 27 and are allowable for at least the same reasons.

III. Claim Rejections under 35 U.S.C. §103(a)

Claims 16-26, 36-39 and 41, including independent claim 41, are rejected under 35 U.S.C. §103(a) as being obvious over Daum in view of Shaw (U.S. Patent No. 6,563,417). These rejections are respectfully traversed.

a. Discussion of Shaw

Shaw discloses an RFID tag that stores in its memory a historical temperature log (col.4, lines 66-67). The RFID tag 12 includes a unique identifier for a pallet 14 to which it is attached (col. 5, lines 40-41). In addition, the RFID tag 12 may include a temperature sensor (col. 5, lines 48-55). In this case, a time based log of sensed information may be maintained and updated so that historical and “snapshot” temperature information may be reported to RF interrogators encountered along a distribution path (col. 5, lines 48-55).

b. Independent claim 41

Claim 41 is directed to an apparatus that comprises at least one storage device that stores at least one dynamic identifier associated with at least one item, at least one sensor, and at least one processor. The at least one dynamic identifier is configured to include at least one variable portion that has at least one of a variable content and a variable length based at least in part on at least one detectable condition associated with the at least one item. The at least one sensor monitors the at least one detectable condition and provides raw condition information representing the at least one detectable condition. The at least one processor, which is coupled to the at least one storage device and the at least one sensor, processes the raw condition information to provide processed condition information that is different from the raw condition information. The at least one processor is configured to periodically update the at least one dynamic identifier so as to provide a representation of the processed condition information as the variable content in the at least one variable portion of the at least one dynamic identifier.

As discussed in connection with claim 1, the Daum reference did not disclose or suggest a dynamic identifier configured to include at least one variable portion that has at least one of a variable content and a variable length based at least in part on at least one detectable condition associated with the at least one item. The Shaw reference adds nothing in this respect. The

“unique identifier” disclosed in Shaw (e.g., col. 5, lines 40-41) is not dynamic, and has neither a variable content nor a variable length. Although the RFID tag 12 includes a temperature sensor, the sensed temperature is not used to modify the unique identifier in any way.

Accordingly, Shaw does not disclose the aspects of claim 41 that are absent from Daum. Specifically, Shaw does not disclose or suggest a dynamic identifier configured to include at least one variable portion. Moreover, Shaw does not disclose or suggest a dynamic identifier configured to include at least one variable portion based at least in part on a detectable condition.

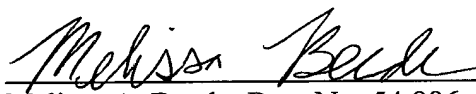
In view of the foregoing, no combination of Daum and Shaw discloses or suggests a dynamic identifier configured to include at least one variable portion that has at least one of a variable content and a variable length based at least in part on at least one detectable condition associated with at least one item, as recited in claim 41, and therefore cannot anticipate this claim. Accordingly, withdrawal of this rejection is respectfully requested.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
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Docket No.: S1446.70000US01
Date: April 13, 2005
x04/13/05x